

## New decisions in manufacturing techniques of the cemented parts of cars

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### Abstract

© 2018 Trans Tech Publications, Switzerland. The unused reserves of metal and manufacturing techniques of forgings and hardening of products promoting minimization and stabilization of deformation and a buckling of gear details are revealed. Need of rationing of size of a hardenability of steel, a regulation of speed of cooling of forgings after hot stamping and application of isothermal annealing as preliminary heat treatment is established. The rational scheme of laying and technology of low-temperature cementation of pinion gears providing the minimum change of the geometrical sizes of details in chemical and thermal processes is offered.

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### Keywords

Buckling, Cementation, Deformation, Forging, Gear details, Steel

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